What is claimed is:

1. A flexible support apparatus comprising:

a support base having an opening in one surface;

a mounting means having an opening in one surface; and

a permanently bendable metal rod having a first end installed in the opening of the support base and fused directly to the support base, and having a second end installed in the opening of the mounting means and fused directly to the mounting means.

2. The apparatus of claim 1 wherein the metal rod is covered by a flexible sheath.

3. The apparatus of claim 2 wherein each of the opening in the support base and the opening in the mounting means further comprises a second larger opening into which opposite ends of the flexible sheath are inserted.

4. The apparatus of claim 1, further comprising a welded joint between the metal rod and each of the support base and the mounting means.

5. The apparatus of claim 4 wherein each of the support base and the mounting means are formed of an ultrasonically weldable material.

6. The apparatus of claim 5 wherein the metal rod further comprises a solid metal rod formed of a material selected from the group of materials comprising: aluminum, copper, and copper coated with another metal material.

7. The apparatus of claim 6 wherein the first and second ends of the metal rod further comprise an upset metal finish.

8. The apparatus of claim 4 wherein each of the metal rod, the support base and the mounting means are formed of a material that is metal-to-metal fusible by conventional means.

9. A flexible support apparatus for supporting heavy objects relative to a fixed surface, the flexible support apparatus comprising:

a support base having a substantially tubular aperture;

a mounting bracket having a substantially tubular aperture; and

a permanently bendable metal rod having a first end inserted into the tubular aperture of the support base and having a weld joint formed therebetween, and a second end inserted into the tubular aperture of the mounting bracket and having a weld joint formed therebetween.

10. The apparatus of claim 9 wherein the support base and mounting bracket are both formed of an ultrasonically weldable material, and the weld joints formed between the metal rod and each of the support base and the mounting bracket further comprise ultrasonic weld joints.

11. The apparatus of claim 10 wherein the first and second ends of the metal rod further comprise upset surface material.

12. The apparatus of claim 11 wherein the metal rod further comprise a metal rod formed of a material selected from the group of materials comprising: aluminum, copper, and copper coated with zinc.

13. The apparatus of claim 9 wherein the metal rod, support base and mounting bracket are formed of aluminum.

14. The apparatus of claim 9, further comprising a flexible plastic sheath disposed around the metal rod between the support base and the mounting bracket.

15. The apparatus of claim 14 wherein each of the support base and the mounting bracket further comprises a respective counter-bore substantially concentric with the respective tubular aperture and sized to admit the flexible plastic sheath.

16. A method for forming a flexible support apparatus, the method comprising:

forming a support base having a tubular aperture therein;

forming a mounting bracket having a tubular aperture therein;

fusing a first end of a permanently bendable metal rod in the tubular aperture of the support base; and

fusing a second end of a permanently bendable metal rod in the tubular aperture of the mounting bracket.

17. The method of claim 16 wherein:

forming a support base further comprises molding a support base of an ultrasonically weldable material;

forming a mounting bracket further comprises molding a mounting bracket of an ultrasonically weldable material; and

fusing first and second ends of the metal rod in the respective tubular apertures of the support base and mounting bracket further comprises ultrasonically welding the first and second ends of the metal rod in the respective tubular apertures of the support base and mounting bracket.

18. The method of claim 17, further comprising installing a flexible sheath around the metal rod.

19. The method of claim 18 wherein:

forming a support base having a tubular aperture therein further comprises forming a second tubular aperture therein that is of larger diameter and is substantially concentric with a first tubular aperture having the metal rod fused therein;

forming a mounting bracket having a tubular aperture therein further comprises forming a second tubular aperture therein that is of larger diameter and is substantially concentric with a first tubular aperture having the metal rod fused therein; and

installing a flexible sheath around the metal rod further comprises inserting opposite ends of the flexible sheath into the respective second tubular apertures.

20. The method of claim 16 wherein:

forming a support base further comprises forming a support base of a weldable aluminum material;

forming a mounting bracket further comprises forming a mounting bracket of a weldable aluminum material; and

fusing first and second ends of the metal rod in the respective tubular apertures of the support base and mounting bracket further comprises aluminum welding the first and second ends of the metal rod in the respective tubular apertures of the support base and mounting bracket.

21. The method of claim 20, further comprising installing a flexible sheath around the metal rod.